

### **REMARKS**

This is a response to the Advisory Action mailed December 5, 2006 (“Advisory Action”). The Advisory Action states that the amendments proposed by the amendment filed November 21, 2006 (“Prior Amendment”), would not be entered because further consideration and/or search would be required.

Prior to entry of this paper, Claims 1-20 were pending. In this paper, Claims 1, 5, 11, and 13 are amended and Claims 27-32 are added. No claims are canceled. Claims 1-20 and 27-32 are currently pending. No new matter is added by way of this amendment. For at least the following reasons, Applicants respectfully submit that each of the presently pending claims is in condition for allowance.

### **Claim Rejections - 35 U.S.C. § 103**

In the final Office Action dated September 21, 2006 (“Office Action”), Claims 1-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Agarwal et al., U.S. Patent Publication No. 2004/0032406 (“Agarwal”), in view of Donnelly et al., U.S. Patent Publication No. 2004/0223571 (“Donnelly”), and in further view of Agazzi, U.S. Patent Publication No. 2002/0122503 (“Agazzi”).

### **Independent Claim 5**

Upon review of the Advisory Action, it appears that the Advisory Action failed to address the allowability of Claim 5.

Claim 5 is respectfully submitted to be allowable at least because none of the cited references, either singly or in any combination, disclose or suggest a circuit “wherein the first selected phased signal, the second selected phased signal, and at least one selected phase information signal are received into the phase mixer.”

As can be seen in fig. 6 of Donnelly, phase interpolator 560 only receives selected phased signals Kx and Ky from the selection circuitry 510. Donnelly fails to disclose or suggest a phase mixer that receives at least one selected phase information signal *in addition* to the first and second selected phased signals. Likewise, Agarwal and Agazzi also clearly fail to disclose or suggest such a phase mixer. Claim 5 is therefore allowable for at least this reason.

### Independent Claim 1

The Prior Amendment argued that the Claim 1 was allowable over any combination of Agarwal, Donnelly, and Agazzi (1) because these references, either singly or in any combination, fail to disclose or suggest “a phase locked loop (PLL) circuit adapted to generate a plurality of phased signals” and (2) because there is no motivation to combine Agarwal with Donnelly.

Claim 1 is respectfully submitted to be allowable at least because Agarwal, Donnelly, and Agazzi, either singly or in any combination, fail to disclose or suggest “a phase locked loop (PLL) circuit adapted to generate a plurality of phased signals ... wherein the PLL is arranged to provide each phased signal of the plurality of phased signals on at least one corresponding separate signal line of a plurality of signal lines”, as recited by Applicant’s Claim 1.

With respect to the second argument, the Advisory Action maintains the allegation that it is obvious to combine the DLL of Donnelly with the PLL of Agarwal in order to provide a more stable output of the DLL.

The Applicant respectfully submits that the Advisory Action fails to consider Donnelly as a whole, as required by MPEP 2141.03(VI). Specifically, MPEP 2141.03(VI) states that “A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” Further, MPEP 2145(X)(D)(1) states that “[a] prior art reference that “teaches away” from the claimed invention is a *significant factor* to be considered in determining obviousness” (emphasis added).

Here, Donnelly specifically and clearly teaches away from the use of PLL circuits. It expressly eschews use of PLLs due to the problems with second order stability and output errors that occur in response to inputs changes or power supply variations. (Donnelly, pg. 1, paragraph [0004]). These problems are common to PLL circuits. Thus, Donnelly teaches a DLL circuit that can provide some of the functionality of a PLL circuit and specifically teaches away from combining a PLL with a DLL. Therefore, one of ordinary skill in the art would not be motivated to combine Donnelly with Agarwal.

Accordingly, Claim 1 is allowable for at least the above reasons.

#### Independent Claims 11 and 13

Independent Claims 11 and 13 are respectfully submitted to be allowable for at least reasons similar, albeit different, to those given above in respect to Claim 1.

#### Remaining Dependent Claims

New Claims 27-32 were added to point out what the Applicant regards as the invention and these claims are supported at least by fig. 13 and pg. 8, lines 1-3 of the specification. These new claims are respectfully submitted to be allowable for at least the reasons discussed above regarding independent Claim 5 upon which they depend.

Additionally, it is respectfully submitted that the remaining dependent Claims 2-4, 6-10, 12, and 14-20 are allowable at least based on their dependence on one of Claims 1, 11, or 13.

